



South Pacific Division  
U.S. Army Corps of Engineers

## **5-YEAR PLAN GEOTECHNICAL ENGINEER**

This five-year developmental plan provides a sample for the civil or geotechnical engineering individual aspiring to start a career in one of the U S Army Corps of Engineer South Pacific Division Districts. The individual and the supervisor will develop a more comprehensive plan based on more formal Corps guidance.

Year 1. Months 0-3, Work under the leadership of a registered civil engineer with a geotechnical background. Read and become familiar with Corps ER, EM, ETL, etc. Perform geotechnical analyses. Perform site visits, slope stability and foundation analyses. Prepare soil-boring logs. Months 4-9. Obtain rotational assignments in various functional areas. Months 10-12. Attend Corps PROSPECT training- Computer Applications in Geotechnical Engineering

Year 2-3. Develop plans of field soil investigations. Perform site assessments, geotechnical analyses and scopes of work for AE soil boring work orders. Perform field and laboratory soil and material testing thru vendor or Corps PROSPECT training. Conduct geotechnical site visits during construction. Write sections of geotechnical appendix. Attend training in shear strength of soils and slope stability analysis. Take AE Contract PROSPECT training. Obtain training in unit price cost estimating. Acquire developmental assignment in civil design. Take steps to obtain professional registration.



Photo taken from waste fill area, downstream of derrick stone, placed as spillway energy dissipater. Photo shows downstream slope and concrete chute spillway over Los Alamos Dam.

Year 4. Perform geotechnical analyses for more complex projects. Prepare scopes of work and cost estimates for AE geotechnical analyses and design. Prepare laboratory testing schedules and requirements. Interpret laboratory test results. Obtain training in seepage and seismic design.



**Year 5.** Perform analyses and assessments for complex projects. Serve as lead geotechnical engineer for major projects. Determine project scope of work and prepare budget estimates. Prepare geotechnical reports and appendices. Prepare drawings and technical sections to specifications of contract documents. Apply independent judgment to solve complex problems. Write and present technical papers at Corps workshops and at professional conferences. Obtain project management training and engineering and design quality management training.